

BEHAVIORAL SCIENCES

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MD3

BEHAVIORAL SCIENCES



PSYCHIATRIC DISORDERS

Psychiatric (DSM-5) Disorders

Psychiatric Disorders

Learning Objectives

- Demonstrate understanding of the different psychiatric disorders that are identified in childhood and adolescence
- Demonstrate understanding of the different thought disorders that affect interpretation of reality
- Demonstrate understanding of the different mood and anxiety disorders
- Answer questions about the features of obsessive-compulsive disorder
- Answer questions about different eating disorders
- Answer questions about somatic symptom, dissociative, and personality disorders
- Demonstrate understanding about the types of sexual disorders

Psychiatric Disorders

CHILDHOOD AND ADOLESCENCE

- Intellectual Disability
- Autism Spectrum Disorders
- Tourette Syndrome
- Attention Deficit Hyperactivity Disorder

THOUGHT DISORDERS

- Schizophrenia
- Brief Psychotic disorder
- Schizophreniform disorder
- Schizophrenia
- Schizoaffective disorder

Psychiatric Disorders

MOOD DISORDERS

- Major Depressive Disorder
- Persistent Depressive Disorder
- Bipolar Disorder
- Cyclothymic Disorder

ANXIETY DISORDERS

- Panic disorder
- Generalized anxiety disorder
- Phobia
- Social Anxiety

Psychiatric Disorders

OBSESSIVE-COMPULSIVE DISORDER AND RELATED DISORDERS

- Obsessive-Compulsive Disorder
- Body Dysmorphic Disorder
- Hoarding Disorder
- Trichotillomania

TRAUMA AND STRESSOR-RELATED DISORDERS

- Post-Traumatic Stress Disorder and Acute Stress Disorder
- Adjustment Disorder

Psychiatric Disorders

EATING DISORDERS

- Anorexia Nervosa
- Bulimia Nervosa
- Binge Eating Disorder

SOMATIC SYMPTOM AND RELATED DISORDERS

- Somatic Symptom Disorder
- Illness Anxiety Disorder
- Conversion Disorder
- Factitious Disorder
- Malingering

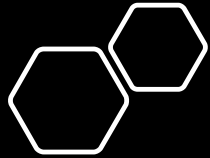
Psychiatric Disorders

DISSOCIATIVE DISORDERS

PERSONALITY DISORDER

SEXUAL DISORDER

- Sexual Desire Disorders
- Sexual Arousal Disorders
- Orgasm Disorders
- Paraphilic Disorders
- Genito-Pelvic Pain Disorders



Psychiatric Disorders

Intellectual Disability

The most known cause of intellectual disability is **fetal alcohol syndrome**

(FAS), while the most common genetic causes are **Down** and **fragile-X syndromes**.

Level	Functioning
Mild (85% of intellectually disabled; 2:1 male: female)	Self-supporting with some guidance; usually diagnosed first year in school
Moderate	Benefits from vocational training but needs supervision; sheltered workshops
Severe	Vocational training not helpful, can learn to communicate and manage basic self-care habits
Profound	Needs highly structured environment with constant nursing care and supervision

Psychiatric Disorders

Autism Spectrum Disorders

The hallmark of autism spectrum disorders is an **inability to connect with others**.

It is usually diagnosed age <3. Boys > girls.

Clinical features include:

- Problems with communication and reciprocal social interaction
- Abnormal or delayed language development; impairment in verbal and non-verbal communication
- No separation anxiety; problems with relationships
- Pronoun reversal
- Fails to assume anticipatory posture, shrinks from touch
- Poor eye contact

Psychiatric Disorders

- Restrictive and repetitive behaviours (RRBs), interests, or activities
- Stereotype or repetitive movements (echolalia, lining up toys)
- Inflexibility
- Oblivious to external world
- Preference for inanimate objects

With autism, monozygotic concordance is greater than dizygotic concordance. Severity correlates to IQ deficiency. EEG may be abnormal. Seizures are present in 25% of patients.

Differential diagnosis includes:

1. Rett syndrome

- Girls > boys
- Microcephaly

2. Social communication disorder

- Communication disorder
- Absence of RRBs

Treatment is behavioural techniques (shaping) and antipsychotics (for aggression only), e.g., risperidone

Psychiatric Disorders

Tourette Syndrome

Tourette syndrome is characterized by multiple motor and vocal tics that occur many times per day or intermittently for >1 year. Men > women 3:1.

- Mean onset is age 7 (onset must be age <18)
- Tics can be simple (rapid, repetitive contractions) or complex (appear as more ritualistic and purposeful); simple tics appear first
- Evidence of genetic transmission: ~50% concordance in monozygotic twins
- Associated with increased levels of dopamine
- Associated with ADHD and OCD

Treatment is haloperidol, pimozide, or clonidine.

Psychiatric Disorders

Attention Deficit Hyperactivity Disorder

Attention deficit hyperactivity disorder (ADHD) is marked by inattention, impulsivity, and/or hyperactivity that lead to problems functioning at home, school, or work. Men > women 10:1. Impairment must occur in at least 2 settings.

- Symptoms >6 months
- Symptoms age <12
- Associated with a dopaminergic and noradrenergic imbalance

Treatment is methylphenidate, dextroamphetamine, atomoxetine, or guanfacine

Psychiatric Disorders

Conduct Disorder

Age Until age 18

Gender Boys > girls

Symptoms: 6 months of aggressive behavior

Violation of rules of society

Destruction of property

Deceitfulness or theft

Etiology Genetic

Psychiatric Disorders

Oppositional Defiant Disorder

Age: Preteens–teens

Gender: Boys > girls (pre-puberty) Boys = girls (post-puberty)

Symptoms 6 months of negative, hostile, and defiant behaviours towards authority figures

Psychiatric Disorders

Brief psychotic disorder

Hallucinations, delusions, disorganized behavior
or thinking

>1 day but <30 days

Antipsychotics

Psychiatric Disorders

Schizophreniform disorder

Hallucinations, delusions, disorganized behavior
or speech

>1 month but <6 months

Antipsychotics

Psychiatric Disorders

Schizoaffective disorder

- Schizophrenia symptoms such as hallucinations and delusions PLUS mood disorder symptoms such as depression and mania
- Must have at least 2 weeks of psychotic symptoms in the absence of mood symptoms

Antipsychotics and mood stabilizers if bipolar type
or antidepressants if depressed type

Psychiatric Disorders

Schizophrenia

Hallucinations, delusions, disorganized behaviour or speech, catatonic symptoms, negative symptoms, marked reduction in level of functioning

>6 months

Antipsychotics

Psychiatric Disorders

Schizophrenia

Schizophrenia is seen in 1% of population. Men = women.

Age of onset: men age 15–25; women age 25–35 (90% of patients with schizophrenia are age 15–55).

Persons with schizophrenia have higher mortality rate from accident and natural causes.

Persons with schizophrenia are more likely to have been born in winter or early spring (increased risk of schizophrenia after exposure to influenza).

Lifetime prevalence of substance abuse >50%.

>90% of schizophrenics smoke (nicotine may reduce positive symptoms and improve some cognitive impairments).

There are several theories of schizophrenia:

Genetic: monozygotic greater than dizygotic

Viral: more born in winter and early spring

Social: downward drift and social causation theories

Neurochemical/biochemical: associated with increased levels of dopamine

Psychiatric Disorders

Neurotransmitter

Dopamine

- Increases
- Effects positive symptoms

Serotonin

- Increases
- Positive and negative symptoms

Glutamate

- Increase/decreases
- PCP (glutamate antagonist) leads to schizophrenia-like symptoms

Nicotine

- Decreases
- Cognition

GABA

- Leads to hyperactivity of dopaminergic neurons

Psychiatric Disorders

Brain area	Ventricles	Symmetry	Limbic system	Prefrontal cortex	Thalamus	Basal ganglia and Cerebellum
Changes	Increase	Decrease	Decreases	Decreases	Decreases	Increases/ Decrease

Psychiatric Disorders

Major Depressive Disorder

- Women > men
- Symptoms >2 weeks and affect level of functioning (must include depressed mood or anhedonia, plus other symptoms such as low energy, poor concentration, sleeplessness, loss of appetite or libido, suicidal ideation)
- Associated with decreased levels of NE, dopamine, and serotonin
- Suicide rate 15%

Treatment is antidepressants.

Major depressive disorder with seasonal pattern is associated with abnormalities in melatonin. It is common in the Northern hemisphere during the winter months. Treatment is bright light therapy (phototherapy).

Psychiatric Disorders

Persistent Depressive Disorder

Persistent depressive disorder is less severe than major depressive disorder.

- Symptoms >2 years; depressive symptoms experienced most days
- Hospitalization not usually needed; functioning not significantly impaired

Treatment is primarily psychotherapy.

Psychiatric Disorders

Bipolar Disorder

Bipolar disorder is the **most genetic of all the psychiatric disorders.**

Men = women.

- Symptoms of mania >1 week, with loss of functioning.

Manic symptoms include increased energy, decreased sleep, euphoria, delusions of grandeur, increased libido, distractibility, flight of ideas, increased self-esteem.

- Symptoms of major depressive disorder are very common but not necessary for diagnosis.

There are 2 types of bipolar disorder: **bipolar I** involves **mania and depression**; **bipolar II** involves **hypomania and depression**.

Psychiatric Disorders

Cyclothymic Disorder

Symptoms >2 years characterized by:
Mood swings

Periods of hypomania alternating with periods of milder depression (neither meets criteria for mania or major depressive disorder)

Treatment is primarily psychotherapy.

Psychiatric Disorders

ANXIETY DISORDERS

Anxiety disorders are linked to abnormalities in serotonin, norepinephrine, and GABA.

Women > men (especially young women).

Psychiatric Disorders

Panic Disorder

- Presence of panic attacks for >1 month
- Involves worry about having more attacks and significant maladaptive behavioural changes related to the attack
- Panic attacks are short-lived and out of the blue, with increased autonomic hyperactivity:

Increased pulse

Hyperventilation

Palpitations

Tremors

Diaphoresis

Dissociative symptoms

Treatment is benzodiazepines (for panic attack) or SSRIs (for panic disorder). If hyperventilating, the patient should be instructed to breathe into a paper bag.

Psychiatric Disorders

Generalized Anxiety Disorder

Generalized anxiety disorder is a constant sense of worry for >6 months about things one should not have to worry about. The anxiety interferes with daily life:

- Problems with sleep
- Decreased concentration
- Irritability

Treatment is SSRIs and buspirone.

Psychiatric Disorders

Phobias

Phobias are irrational fears of things or situations and the need to avoid them.

Specific phobias include fear of things or objects, such as animals, heights, and elevators.

Treatment is a behavioural modification technique such as

- Systematic desensitization
- Flooding.

Psychiatric Disorders

Social Anxiety

Social anxiety is fear of being embarrassed or humiliated in a social situation, such as in a public restroom or restaurant, or public speaking (called stage fright or **performance anxiety** only if related to performance in public).

- Treatment is Antidepressants and Beta-blockers (for stage fright, given before an event).

Psychiatric Disorders

Obsessive-Compulsive Disorder

Obsessions: thoughts that are intrusive, senseless and time consuming

Ego-dystonic

Thoughts are distressing

Increases anxiety

Most common thoughts include contamination and doubt

Defense mechanism: reaction formation

Compulsions: acts that are repetitive, time consuming

Ego-dystonic

Reduces the anxiety associated with the obsessive thoughts

Most common include washing and checking

Defense mechanism: undoing

Equal incidence in men and women

Treatment is antidepressants and behavioural modification (exposure and response prevention).

Psychiatric Disorders

Body Dysmorphic Disorder

Body dysmorphic disorder is belief that some part of one's body is abnormal, defective, or misshapen. It is associated with serotonin. It must be differentiated from body image disturbance seen in anorexia nervosa.

Treatment is psychotherapy and SSRIs.

Psychiatric Disorders

Hoarding Disorder

Hoarding disorder is difficulty parting with one's possessions regardless of their value; level of functioning changes as a result of clutter in the home. There is distress when thinking of getting rid of items.

Treatment is SSRIs and psychotherapy.


Psychiatric Disorders

Trichotillomania

Trichotillomania is an irresistible urge to pull out one's own hair followed by a sense of relief. Many patients eat or chew the hair. The most common areas of hair pulling are the scalp, eyebrows, eyelashes, beard, and pubic area.



Psychiatric Disorders



TRAUMA AND
STRESSOR-RELATED
DISORDERS

Psychiatric Disorders

Post-Traumatic Stress Disorder and Acute Stress Disorder

Stress disorders result from exposure to actual or threatened death, serious injury, or sexual violation in one of the following ways:

- Direct experience
- Repeated exposure (first responders)
- Witnessing the event
- Learning of violent or accidental traumatic event involving a close family member or friend

Exposure may lead to re-experiencing of symptoms in the form of nightmares or flashbacks. Women > men. Symptoms include:

- Phobic avoidance
- Hypervigilance
- Increased startle reflex
- Mood instability
- Sleep disturbances
- Dissociative symptoms

Treatment is exposure therapy and SSRIs.

Psychiatric Disorders

Adjustment Disorder

Adjustment disorder is a maladaptive response to an identifiable stressor causing distress in functioning.

- Symptoms must occur within 3 months of stressor
- Symptoms cannot last >6 months in duration

Treatment is supportive psychotherapy.

Psychiatric Disorders

Anorexia Nervosa

Anorexia is characterized by restriction of food intake that leads to **>15–20% loss of ideal body weight** or **BMI <17**. It is difficult to treat. Girls > boys.

- Body image disturbance (patients feel fat even though they are very thin)
- Fear of gaining weight
- Poor sexual adjustment
- Medical complications include:

Abnormal electrolytes

- Lanugo hair
- Abnormal hormones
- Low blood pressure
- Heart failure
- Osteoporosis

Treatment is hospitalization, behavioural modification, SSRIs, and family therapy.

Psychiatric Disorders

Anorexia Nervosa



Psychiatric Disorders

Bulimia Nervosa

Bulimia nervosa is characterized by binge eating followed by purging. **Weight is normal.** Most patients recover. Girls > boys.

- In bulimia, defense mechanisms are involved, e.g., purge: undoing.

Characterized by:

- **Binge** (rapid ingestion of food)
- **Purge** (compensatory behavior)
- **Vomiting** (signs of **repetitive emesis** include abrasions and callous in fingers/hands, oesophageal tears, enlarged parotid glands, and dental cavities)
- Exercising
- Fasting
- Use of laxatives
- Use of diuretics

Treatment is behavioural modification and SSRIs.



Psychiatric Disorders

Bulimia Nervosa



Psychiatric Disorders

Binge Eating Disorder

Binge eating disorder is binge eating without the compensatory behaviour seen in bulimia nervosa.

Weight is above normal.

Treatment is stimulants

Psychiatric Disorders

SOMATIC SYMPTOM AND RELATED DISORDERS

Somatic Symptom Disorder

Excessive thoughts, feelings, and behaviour related to the somatic symptoms

- Duration >6 months
- Functioning impaired

May be only one symptom; could be related to medical illness. Main focus is how you react to the symptom

Treatment should be by one identified physician along with psychotherapy.

Psychiatric Disorders

Illness Anxiety Disorder

Illness anxiety disorder is characterized by the belief that one has an underlying illness, despite constant reassurance.

- Duration >6 months
- Somatic symptoms are not present; if present, mild

Treatment is psychotherapy.

Psychiatric Disorders

Conversion Disorder

Conversion disorder is the development of neurological symptoms following a psychological stressor that cannot be medically explained.

- All work-up tests will be negative.
- Patients will be indifferent to symptoms (*la belle indifference*).

Treatment is psychotherapy.

Psychiatric Disorders

Factitious Disorder

Factitious disorder is the conscious production of signs and symptoms of a mental or physical illness. There are 2 types: **imposed on self** and **imposed on others**.

- Unconscious motivation (without knowing why)
- No obvious external gains
- Most patients become angered when confronted, will leave hospital against medical advice

Treatment is psychotherapy.

Psychiatric Disorders

Malingering

Malingering is **not a mental illness**. It is the conscious production of signs and symptoms of a mental or physical illness.

- Conscious motivation
- Obvious external gains: money, avoiding prison, time off from work or school
- Most patients become angered when confronted

Psychiatric Disorders

DISSOCIATIVE DISORDERS

In dissociative disorders, the defense mechanism used is **dissociation**. It involves the splitting off of brain from consciousness, typically caused by traumatic events.

- **Amnesia**: inability to recall important personal information
- Dissociative identity disorder (multiple personality): presence of ≥ 2 distinct identities; will have lapses in memory
- **Depersonalization disorder**: recurrent experiences of being detached from or outside of one's body

“Out of body” experiences

Reality testing stays intact

Causes significant impairment

- **Fugue** (may appear with all subtypes): involves sudden unexpected travel, an inability to recall one's past, or confusion of identity

Psychiatric Disorders

PERSONALITY DISORDERS

Personality disorders are maladaptive patterns of behaviour. They are ego syntonic and lifelong.

Cluster A: Odd, Eccentric Type

Cluster B: Dramatic and Emotional

Cluster C: Anxious and Fearful

Psychiatric Disorders

Cluster A: Odd, Eccentric Type

Paranoid: long-standing suspiciousness or mistrust of others; a baseline of mistrust

- Preoccupied with issues of trust
- Reluctant to confide in others
- Reads hidden meaning into comments or events
- Carries grudges

Psychiatric Disorders

Schizoid: lifelong pattern of social withdrawal;
they like it that way

- Seen by others as eccentric, isolated, and withdrawn
- Restricted emotional expression

Psychiatric Disorders

Schizotypal: very odd, strange, weird

- Magical thinking (including ESP and telepathy)
- Ideas of reference
- Illusions
- Socially anxious
- Lacks close friends, socially isolated
- Incongruous affect
- Odd speech
- May have short-lived psychotic episodes

Psychiatric Disorders

Histrionic: colourful, dramatic, and extroverted

- Unable to maintain long-lasting relationships
- Attention-seeking
- Desires spotlight
- Uses seductive behavior

Psychiatric Disorders

Narcissistic: grandiose sense of self-importance

- Preoccupied with fantasies of unlimited wealth, power, love
- Demands constant attention
- Has fragile self-esteem
- Prone to depression
- Meets criticism with indifference or rage
- Genuinely surprised and angered when others don't do as they want
- Can be charismatic

Psychiatric Disorders

Borderline: very unstable affect, behaviour, self-image

- In constant state of crisis, chaos
- Self-detrimental impulsivity: promiscuity, gambling, overeating, substance-related disorders
- Unstable but intense interpersonal relationships
- Have great difficulty being alone
- Self-injurious behavior
- Multiple suicide attempts
- History of sexual abuse
- Defense mechanisms: splitting, passive–aggression
- Women > men 2:1

Psychiatric Disorders

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Psychiatric Disorders

Avoidant: extreme sensitivity to rejection; sees self as socially inept

- Excessive shyness, high anxiety levels
- Social isolation, but an intense, internal desire for affection and acceptance
- Tends to stay in same job, same life situation, and same relationships

Psychiatric Disorders

Obsessive-compulsive: characterized by orderliness and perfectionism

- Inflexible
- Control freak
- Loves lists, rules, order
- Does not want change
- Rigid and excessively stubborn
- Wants to keep routine

Psychiatric Disorders

Dependent: gets others to assume responsibility

- Subordinates own needs to others
- Unable to express disagreement
- Greatly fearful of having to care for self
- May be linked to abusive spouse

Psychiatric Disorders

Dependent: gets others to assume responsibility

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Psychiatric Disorders

Sexual Arousal Disorders

In **female sexual interest/arousal disorder**, women are unable to achieve adequate vaginal lubrication.

Reasons include

- possible hormonal connection (many women report peak sexual desire just prior to menses) and
- antihistamine/ anticholinergic medications, which can reduce vaginal lubrication.
- Personal factors

Male erectile disorder (impotence) has 10–20% lifetime prevalence; point prevalence is 3%. Half of men treated for sexual disorder complain of impotence.

- Incidence is 8% young adult and 75% men age >80
- 50% more likely in smokers

Be sure to check alcohol usage, diabetes, and marital conflict, as it must be determined whether the cause is organic or psychological. Assessment is made with the postage stamp test, snap gauge (to test physiological vs. psychological).

Treatment is sildenafil, vardenafil, and tadalafil.

Psychiatric Disorders

Orgasm Disorders

Female orgasm disorder is an inability to achieve orgasm. Overall prevalence from all causes is 30%.

About 5% of married women age >35 have never achieved orgasm.

Treatment is fantasy, vibrators.

In **premature ejaculation**, the man ejaculates before or immediately after entering vagina. It is more common if early sexual experiences were in backseat of car or with a prostitute, or there is anxiety about the sexual act.

Treatment is stop-and-go technique, squeeze technique, and SSRIs

Priapism

Psychiatric Disorders

Paraphilic Disorders

- Paedophilia: sexual urges toward children; most common paraphilia
- Exhibitionism: recurrent desire to expose genitals to stranger
- Voyeurism: sexual pleasure from watching others who are naked, grooming, or having sex; begins early in childhood
- Sadism: sexual pleasure derived from others' pain
- Masochism: sexual pleasure derived from being abused or dominated
- Fetishism: sexual focus on objects, e.g., shoes, stockings; transvestite fetishism involves fantasies or actual dressing by heterosexual men in female clothes for sexual arousal

Psychiatric Disorders

- Frotteurism: male rubbing of genitals against fully clothed woman to achieve orgasm; subways and buses
- Zoophilia: animals preferred in sexual fantasies or practices
- Coprophilia: combining sex and defecation
- Urophilia: combining sex and urination
- Necrophilia: preferred sex with cadavers
- Hypoxyphilia: altered state of consciousness secondary to hypoxia while experiencing orgasm; achieved with autoerotic asphyxiation, poppers, amyl nitrate, nitric oxide

Psychiatric Disorders

Genito-Pelvic Pain Disorders

Genito-pelvic pain/penetration disorders involve involuntary muscle constriction of the outer third of the vagina, which prevents penile insertion. Psychological in origin, they involve recurrent and persistent pain before, during, or after intercourse.

- Diagnosed only in women
- Not diagnosed if caused by a medical conditions

Treatment is relaxation and Hegar dilator

Psychiatric Disorders

Hegar Dilators



Psychiatric Disorders

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